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(71) Applicant: OSRAM SYLVANIA INC. Danvers, MA 01923 (US)

(72) Inventors:

 Chen, Nancy H. 01845 North Andover MA (US)

 Olsen, Joseph-A. 01930 Gloucester MA (US)

(74) Representative: Pokorny, Gerd et al OSRAM GmbH
Postfach 22 16 34
80506 München (DE)

(54) Metal halide HID lamp dimmable with good color consistency

(57) Metal halide lighting with good color during dimming may be obtained. An appropriate balance of commonly used metal halides (NaI, Dyl₃, Cel₃, Cal₂, T11) is dosed in the lamp. No mercury is used. A higher than typical xenon fill pressure from 50 to 500 Kilopascals may be used to help control thermal properties and voltage. If necessary, modulation of the power at acoustic reso-

nance frequencies may be used to straighten and center the arc. Efficient and pleasant white output is obtained. As the power is reduced, the chromaticity either (1) remains fairly constant or (2) drifts acceptably towards warm pinkish colors. Large factors of attenuation in output can be realized. The lumen output was reduced by at least a factor of twenty in one sample as the power was dimmed from 70 to 20 watts.

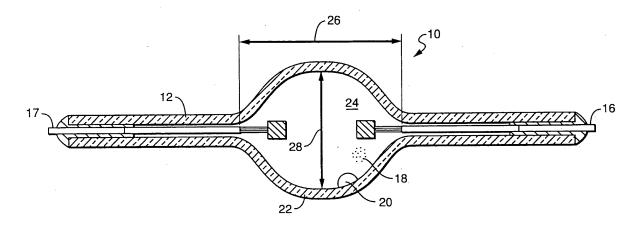


FIG. 1

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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